NAME ……

Stream ……

UGANDA CERTIFICATE OF EDUCATION

S.2 Chemistry theory Term I- 2025

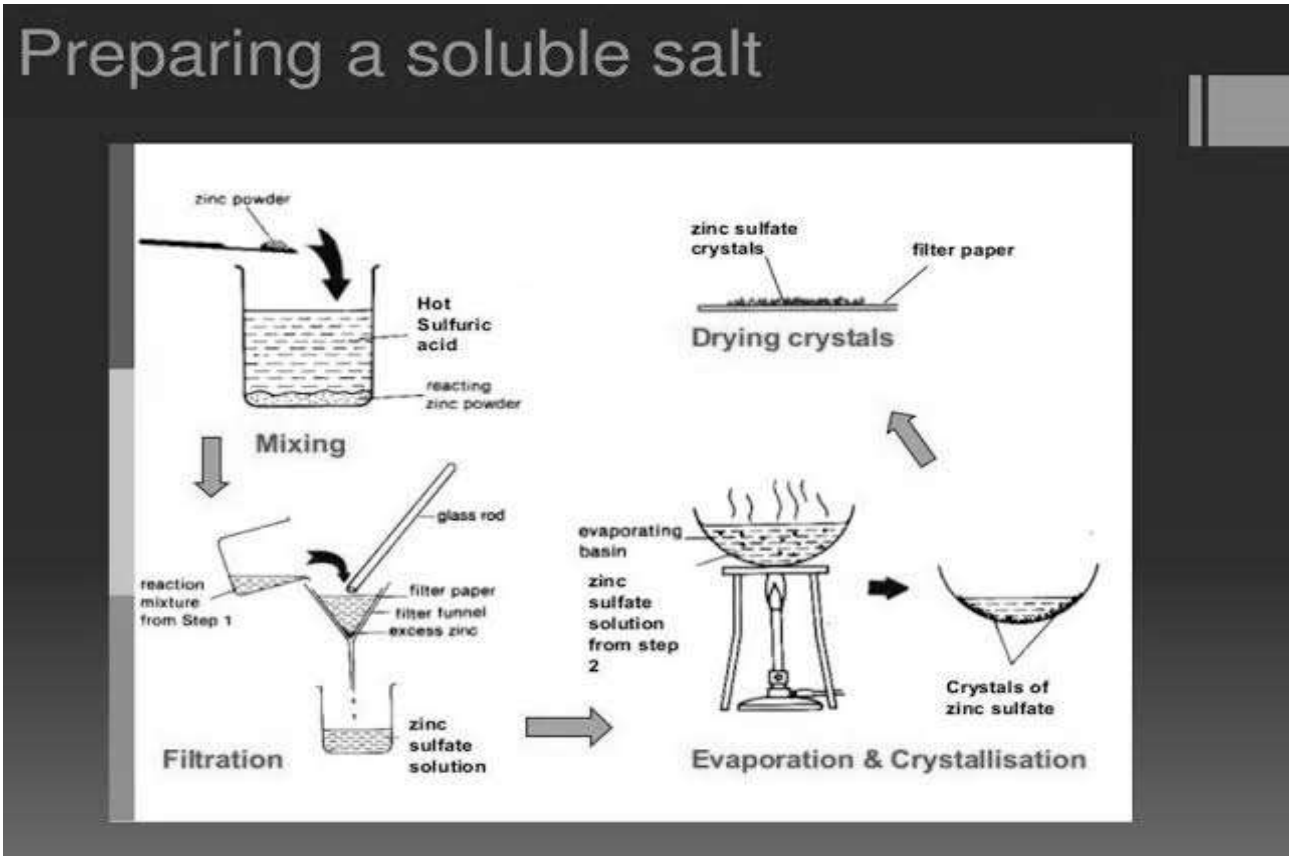
Time: 1.5 Hours

INSTRUCTIONS TO CANDIDATES:

- This paper consists of **three** examination items.
- Answer **all** items.

Item 1.

A Team of three S2 students were tasked to prepare a soluble salt called copper (ii) sulphate . They followed the procedure below .



- They measured 50cm^3 of dilute sulphuric acid and placed it in a glass beaker.
- The acid was warmed and copper ii oxide solid was added little at a time until excess while stirring.
- The mixture was then filtered .
- The filtrate was heated .
- A saturated solution was then cooled The formed crystals were washed using distilled water and then dried between filter papers .

After the practical , they were tasked to answer the questions below .

a) why is it necessary to warm the acid ?

_____

_____

b) Why was copper ii oxide added little at a time while stirring ?

_____

_____

c) Why was the copper ii oxide added until excess .

_____

_____

d) Why is it necessary to allow the saturated solution to cool slowly ?

_____

_____

e) Why was it necessary to wash the salt formed with distilled water ?

_____

_____

f) Apart from copper ii oxide , which other substance can be used to form copper ii sulphate when reacted with sulphuric acid ?

_____

_____

g) Suggest other two ways through which the crystals can be dried apart from the one highligted in the procedures above

_____

_____

Item 2

Kiri beverage company aims at improving packaging of its products using materials that are relatively eco-friendly and cheap for the proprietors . There are various materials of different quality on market however, the marketing advocate has approached you to guide him while making decision.

As a chemistry learner:

a. Explain the

i. Categories of the material.

_____

_____

_____

_____

_____

ii. Suitability of the material.

_____

_____

_____

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_____

b. Advise him on the choice of the material.

_____

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Item 3.

Fresh water bodies like lakes and rivers have been heavily encroached on as a result of rapid urbanization. On world environment day, the Ugandan government through the National Environment Management Authority, is set to rise awareness among the public.
The science club of your school has been invited to be part of the sensitization team.

Task:

As a chemistry learner, prepare presentation that will used during the sensitization under the theme "***FRESH WATER IS A BASIC NECESSITY***".

In your presentation , include

a) The category of the resource .

_____

_____

b) The composition of the resource

_____

_____

c) The impact of the activities to the environment or resource.

_____

_____

_____

_____

d) The mitigation of the impact.

_____

_____

e) The benefit of the resource to the environment .

_____

_____

_____

Think like a proton , always positive !!!!!!!!